

May 5, 2008

Mr. Jon Heinrich Natural Resources Program Manager Wisconsin Department of Natural Resources Bureau of Air Management P.O. Box 7921 Madison, WI 53707

Dear Mr. Heinrich:

SUBJECT:

Proposed Order AM-32-05: Proposed Revisions to the Mercury Emission Requirements Affecting Coal-fired Electric Generating Units (EGUs) in the

Current State Mercury Rule, Chapter NR 446, Wis. Adm. Code

Dairyland Power Cooperative (DPC) submits these comments on the Wisconsin Department of Natural Resources (WDNR) proposed Order AM-32-05 to revise and amend the current Chap. NR 446 Wis. Adm. Code relating to requirements affecting coal-fired electric generating units in Wisconsin, including those owned and operated by DPC. DPC has been involved with the Department on the issue of mercury air emissions and the effort to create reasonable and effective rules for controlling mercury air emissions from coal-fired electric utility units. DPC supported the Department's efforts to create rules establishing mercury emission limits for major utilities that resulted in the current version of Chap. NR 446 rule. We continue our efforts to work cooperatively with the Department with the comments we submit today. In addition, DPC supports the comments presented to the Department in a joint submittal by DPC and the Wisconsin Utility Association (WUA).

DPC is a rural electric cooperative, generation and transmission utility, with headquarters in La Crosse, Wisconsin. DPC provides the wholesale electrical requirements and other services for 25 member electric distribution cooperatives and 19 municipal utilities. These cooperatives and municipals, located in four states (Wisconsin, Minnesota, Iowa, and Illinois), in turn, supply the energy needs of more than half a million people. DPC's generation resources include coal, natural gas, hydro, wind, landfill gas, and animal waste. The revisions to the current NR 446 rule that WDNR has proposed in Order AM-32-05, if promulgated, would have significant impacts on the operation and the cost of production at four of DPC's electric generating units and, thus, DPC continues to have an interest in the development of this rule.

The rule revision that WDNR has proposed in 2008 Proposed Order AM-32-05 ("2008 Proposed Rule") is inconsistent with the scope statement prepared by the Department and published on June 30, 2005 ("2005 Scope Statement"). The 2005 Scope Statement was related to revising the



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Chap. NR 446 mercury control requirements affecting electric generating units to conform the rule to U.S. EPA's Clean Air Mercury Rule (CAMR) that was promulgated on May 18, 2005. The 2005 Scope Statement stated in part:

The state mercury rule in Chapter NR 446 has different mercury emission reductions and compliance determination requirements. The purpose of this action is to revise the state rule and to mirror the federal CAMR requirements.

The 2008 Proposed Rule bears no resemblance to the requirements in what was to be the federal CAMR rule. In fact, there is no federal CAMR rule since the decision on February 8, 2008 by the U.S. Court of Appeals for the District of Columbia to vacate the rule. Further, the requirements to limit mercury emissions from coal-fired electric generating units which WDNR has proposed in the 2008 Proposed Rule have very different regulatory compliance requirements and, the emission limitations greatly exceed the reductions requirements of the CAMR. Due to the vast difference in regulatory scope and the difference in the level of stringency in emission limits, there are costs and operational impacts of the 2008 Rule Proposal that far exceed the CAMR compliance impacts and which certainly are not accounted for in the 2005 scope statement.

When WDNR failed to publish a proper scope statement for the 2008 Proposed Order AM-32-05, as is required by Wis. Stat. § 227.135(1), Wisconsin citizens and the regulated sources, including DPC, were denied the requisite knowledge and notice needed to effectively evaluate their right to request an economic impact report as permitted under Wis. Stat. § 227.137(2). An economic impact report would have provided critical information necessary for the public, regulators, and the regulated community to better understand and comment upon the full impact of the potential options under consideration.

The lost opportunity to petition the Department of Administration (DOA) to prepare an economic impact report also has the consequence that the citizens of Wisconsin, members of the regulated community, including DPC, and the Legislature are denied the opportunity of an independent assessment of the rule proposal. When DOA grants a petition for an economic impact report requested under Wis. Stat. § 227.137(2), it also triggers a requirement under Wis. Stat. § 227.138 that the DOA undertake an independent assessment of the proposed rule; a requirement that is intended to enhance the rule-making process since it places a requirement on the DOA to prepare and publish a report detailing an independent analysis of the proposed rule.

As summarily described above, the citizens of Wisconsin and members of the regulated community, including DPC, have been unlawfully deprived of certain rights and the regulatory process has been denied the benefit of the science and economics that bear on this issue due to WDNR's failure to prepare and issue a proper scope statement for the 2008 Proposed Rule that satisfies the requirements of Wis. Stat. § 227.135(1).

DPC does not believe that the 2005 Scope Statement is a valid and lawful scope statement for the revisions to Chap. NR 446 that the Natural Resources Board and WDNR proposed with Order AM-32-05. Accordingly, the WDNR's activity on this rule-making process should not proceed until a proper scope statement is prepared for the 2008 Proposed Rule, is approved by the Natural Resources Board, and is published in the Wisconsin Administrative Register.

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While we believe this rule-making effort should not proceed until WDNR has properly satisfied the statutory requirements that pertain to the rule-making process, we do offer the comments that follow that address our concerns on specific issues that we have identified with the 2008 Proposed Rule.

A. Retain Requirement for Consistency with Future Federal Mercury Regulations

Wisconsin's citizens will be best served by a state policy that ultimately provides for the alignment of state regulations when a federal rule is finally promulgated that regulates mercury air emissions from coal-fired EGUs. This provision is required under state statutes and is explicitly stated in the current Chap. NR 446 rule (September 2004 version). The current rule requires that WDNR revise the state mercury standards to be consistent with federal mercury standards, including administrative requirements, which may be promulgated. (See Wis. Adm. Code NR 446.029).

DPC is gravely concerned that WDNR has proposed to remand NR 446.029 in the 2008 Proposed Rule. We consider it paramount that any state mercury rule be revised to align rule requirements to federal standards whenever federal standards are promulgated. Consistency of rules across state and federal regulatory programs and the uniformity of regulation across states where we serve our member consumers are of great importance to us. Any revision of the existing 2004 Chap. NR 446 rule must retain the current rules requirement that WDNR act promptly to revise and conform the state rule to provisions of a federal rule when a federal rule is promulgated. We urge WDNR to retain NR 446.029 when it finalizes the rule.

B. Retain The Lower Emitter Exemption in NR 446.06(5) for Units With Annual Mercury Emissions of 25 Pounds or Less

The current Wis. Adm. Code Chap. NR 446, September 2004, contains language at NR 446.06(5) exempting units that have total annual mercury emissions of 25 pounds or less. This provision resulted from considerable dialog between policy-makers and was incorporated in the existing rule to recognize the diminishing returns associated with significant investment for controlling mercury emissions from low emitting units. This same low emitter exemption is not included in the 2008 Proposed Rule. We strongly urge WDNR to include the following exemption language in the final rule:

The mercury emissions from an EGU with electrical output greater than 25 megawatts which is owned or operated by a major utility may be exempt from emission reduction requirements if the total annual mercury emissions are 25 pounds or less.

The reason and logic that supported incorporating a low emitter exemption in the September 2004 rule has not changed.

C. Redefine "Large Coal-fired EGU" to Establish the Applicability Criteria for a 90 Percent Mercury Emission Reduction Requirement

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In the 2008 Proposed Rule, WDNR proposes to define an EGU serving a generator with a nameplate capacity of 150 megawatts and greater as a "large coal-fired EGU" (NR 446.10(7)). In the proposed NR 446.13, WDNR establishes the requirement that "large coal-fired EGUs" meet a minimum mercury emission reduction requirement of 90 percent or limit mercury emissions annually to 0.0080 pounds per gigawatt-hour. DPC believes that imposing such stringent limitations on units less than 500 megawatts is far too extreme and exceeds more realistic regulatory approaches taken by neighboring states such as Minnesota.

The State of Minnesota Mercury Emissions Reduction Act of 2006 defines "qualifying facilities" as those that have a total net capacity of greater than 500 MW from all coal-fired generating units at the facility. The 90 percent mercury emission reduction requirement established in the Act only applies to "qualifying facilities." The result is that the State of Minnesota requires only six units out of a total of 27 coal-fired units in Minnesota to meet a 90 percent mercury emission reduction standard.

With this regulatory program, Minnesota has achieved a *realistic* approach to mercury emissions reduction; an approach that takes into account the nature and age of its electricity generation fleet, fuel type, existing emission controls, and the timing and costs of further reductions.

We urge WDNR to revise the 2008 Rule Proposal to limit the applicability of the 90 percent reduction requirement to only units 500 MWs and greater in size. It appears that this would place the highest reduction requirement on approximately the same number of units in Wisconsin as is achieved with the regulatory program implemented by the State of Minnesota.

D. Redefine "Small Coal-Fired EGU"

In accordance with our position that WDNR should redefine the proposed definition for "large coal-fired EGU," it is also our position that the definition of "small coal-fired EGU" should be redefined. Creating two or more unit size classifications within the range of units greater than 25 MWs to 499 MWs results in a more reasonable rule while still being responsive to the rule objective for achieving mercury reductions. (Note: The upper end of range identified here is in accordance with our comment that "large coal-fired EGU" is defined as the size classification of units 500 MWs and larger.) Each of the unit size classifications would have an assigned mercury reduction limitation with smaller unit size classifications assigned a lower percentage reduction requirement. The required reduction percentage would increment up with increasing unit size classification, up to the "large coal-fired EGU" classification that is assigned the highest reduction limitation of 90 percent. An example of the implementation would be: unit size classification > 25 MWs to 199 MWs - 70 percent reduction and unit size classification 200 MWs to 499 MWs - 80 percent reduction.

Along with identifying more reasonable and cost-effective methods of achieving mercury emission reductions, particularly for smaller and older coal-fired EGUs, as laid out in comments and example above, we believe it is necessary to recognize that some older units in the less than 500 MW unit size classifications are approaching the end of their life span. Responsive to this consideration, we recommend that for unit size classifications less than 500 MWs, the rule should provide a flexible compliance alternative of limiting mercury emissions to a level that is determined as a result of a Best Available Control Technology (BACT) study.

E. Expand the Multi-pollutant Reduction Alternative for Coal-Fired EGUs

It is a fact that cost of air quality control equipment has escalated dramatically and the forecast is that the accelerated rate of price escalation is going to continue for some time. DPC believes that the Department should take serious consideration of this development since we think it creates the opportunity, and provides the justification, to create a tiered approach to the multi-pollutant compliance alternative, particularly to attract units in the "mid" size classification, which are units less than the 500 MW in size.

Units that are 500 MWs and larger in size (i.e., fitting our suggested definition of "large coal-fired EGU") are typically newer units that can justify higher levels of investment due to a longer depreciation life. The larger, and newer, class of units is more likely to be retrofit with Selective Catalytic Reduction (SCR) for NOx control and flue gas desulfurization (FGD), possibly wet FGD, for SO₂ control. However, this leaves out a number of units, e.g., the "mid" size units, which may find it advantageous to agree to more reasonable levels of SO₂ and NOx control - levels of control that can be achieved with equipment requiring lower capital investment than that which can be supported by units in the "large coal-fired EGU" size class.

DPC believes that creating more than one level of the multi-pollutant reduction alternative, differentiated by unit size and SO_2 , NOx, and mercury control levels, may encourage utilities to select the optional multi-pollutant reduction alternative for more units in the "mid" size class. The Department's vision and objective with proposing the multi-pollutant alternative - - which we acknowledge elsewhere in these comments is outside of the scope statement - - has merit. However, in the form in which it is proposed, it has limited appeal except for the largest and newest EGUs, those 500 MWs and larger.

DPC urges the Department to expand the multi-pollutant reduction alternative since we see an opportunity to expand on the vision the Department has for an alternative compliance path to achieve additional reductions in SO₂ and NOx, along with achieving the objective of reducing mercury emissions. However, it will take flexibility in how SO₂ and NOx reduction levels are crafted in order to make the multi-pollutant reduction alternative workable for mid-size EGUs. Some examples of opportunities for flexibility are:

- For some mid-size units, retrofitting an SO₂ scrubber may make sense whereas retrofitting an SCR to meet a NOx emission rate as low as 0.07 lb/MMBtu does not. In this case, flexibility in setting a more reasonable NOx reduction level or emission limitation that can be achieved with retrofit of less costly control technologies may secure participation.
- Units, such as DPC's Genoa 3 unit, that burn a blend of coal types may not be able to scrub for SO₂ control and meet the proposed SO₂ emission rate of 0.10 lb/MBtu. In this case, revising the proposal for SO₂ to offer an alternative compliance term of 0.10 lb/MBtu or 90 percent reduction may remove a barrier to entry to the alternative compliance option.
- Combining the two items above, adding an alternative SO₂ percent reduction limitation with a less stringent NOx reduction level achievable with lower cost control technologies than SCR, may be a best case multi-pollutant compliance plan.

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For mid-size units, a willingness to consider unit size, age, physical site constraints, fuel type, and unit outage schedules, along with a flexible approach for working out reasonable multipollutant reduction compliance plans for achieving reductions in SO₂, NOx, and mercury, could lead to benefits that accrue to the environment and success for both the regulated community and the Department.

F. Allow for Unrestricted Banking of Early Reductions

The 2008 Rule Proposal at NR 446.15 restricts use of early reduction credits (ERCs) to only "5% of the annual allowed emission total." DPC believes that this is an unnecessary and unreasonable constraint on an essential provision of this rule. Banking provisions support technology development and early reductions in emissions, as well as providing compliance flexibility and reduced cost of compliance.

DPC believes that the limitation that WDNR proposes on the use of early reduction credits is without merit. We urge WDNR to revise this provision in the final rule so that regulated sources, both small and large EGUs, have the ability to use 100% of banked mercury ERCs for meeting any compliance option - mercury only or the multi-pollutant reduction alternatives.

G. Remove the Restriction for a Deadline for the Emission Limitation Election

The 2008 Rule Proposal at NR 445.17(2) requires owners or operators of coal-fired EGUs to make an emission limitation election "no later than 24 months of the effective date of this chapter." This designation would be used by the Department to establish permanent emission limitations. DPC believes that this is an unreasonable and unnecessary constraint on the compliance planning process undertaken by the regulated sources. DPC believes that regulated sources should be allowed 60 months from the effective date of the rule to make an emission limitation election. Additionally, the rule should not prohibit the ability to make a revision to an emission limitation election.

H. Increase the Mercury Output-Based Emission Limitation

The 2008 Rule Proposal at NR 446.17(2)(b) establishes an output-based emission rate standard of 0.0080 lbs/GWh as an alternative compliance demonstration to the 90 percent removal efficiency standard. Our review of the data submitted to WDNR for compliance with the baseline procedures in NR 446.06 and NR 446.07 and the data compiled from U.S. EPA's ICR supports an analysis that the proposed output-based emission rate standard of 0.0080 lbs/GWh is far too restrictive. DPC urges the Department to re-evaluate the proposed output-based emission rate standard considering that the Department has data which supports an emission rate that, while higher than what is proposed, is much more representative of the fuel mercury content for the range of fuels typical delivered to EGUs.

I. Add Latest EPA Approved Reference Methods for Source Performance Tests

The reference methods for conducting mercury source performance tests listed in the 2008 Rule Proposal in sections NR 446.04 1(c)a. and NR 446.08 1(c)1. do not reflect the current complete list of EPA approved reference methods. Based on our review of the current list of EPA

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approved reference methods, DPC believes three additional reference methods should be added to NR 446.04 1(c) a. and NR 446.08 1(c)1. to provide the regulated sources the full range of EPA approved reference methods for conducting mercury source performance test. The three reference methods are: ASTM D6784–02 ("Ontario Hydro Method") in 40 CFR Part 75, Section §75.6(43), incorporated by reference in s. NR 484.10 (55x), Method 30A in 40 CFR part 60, Appendix A, and Method 30B in 40 CFR part 60, Appendix A. Including these additional EPA approved reference methods provides flexibility to regulated sources and stack testing firms by allowing the full range of approved test methods including the latest approved methods that we expect will routinely be used to certify mercury continuous emissions monitoring systems.

We conclude by thanking the Department for the opportunity to provide these comments. We believe that significant and fundamental changes are needed to the 2008 proposed revisions to Chap. NR 446 Control of Mercury Emissions rule that the Department has proposed in AM-32-05. We urge the Department not to forget that whatever measures are ultimately required to comply with provisions of a final rule will be paid for by our consumer members or utility ratepayers. With this in mind, we urge the Department to exercise prudent judgment in setting limitations so as not to force prohibitively expensive retrofits on smaller, older units.

We believe the comments we offer are constructive methods for revising the rule in ways that take into account differences in unit size, age, physical site constraints, fuel type, and other aspects of the fleet of electrical generating units while still recognizing the rule objective to reduce mercury emissions.

We look forward to continuing to work with the Department to address our concerns regarding the Department's efforts to revise the Chap. NR 446 rule.

Sincerely,

DAIRYLAND POWER COOPERATIVE

Harold Frank

Manager, Air Quality Programs

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cc: Al Shea, Division Administrator, Air and Waste – WDNR